

A tray unloader for rod-like articles of the tobacco industry includes a horizontally-movable, slidable carriage supporting an independently-driven tray inverting carrier arranged to pick up an upright full tray from a receiving position and invert it during movement to an unloading position. In the unloading position articles are received directly over opposed horizontal bands having a delivery channel between confronting ends and defining the initial level at which articles are received over most of the width of the tray. Downstream of the channel is a conveyor which operates at a relatively high rate during a first phase of unloading for each tray and at a reduced rate during a second phase, so as to allow controlled emptying of the tray and establishment of the residual level of articles in the channel after completion of unloading of each tray.